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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,688	09/29/2003	R. Enrique Viturro	D/A2489	1300
37211	7590	02/24/2005	EXAMINER	
BASCH & NICKERSON LLP 1777 PENFIELD ROAD PENFIELD, NY 14526			LE, JOHN H	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/673,688

Applicant(s)

VITURRO ET AL.

Examiner

John H Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 14-21 is/are rejected.
- 7) ☒ Claim(s) 7-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/29/2004
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim is objected to because of the following informalities:

Claim 1, line 6, after " the printed reference;" , delete --and--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "said set of spatial gray balanced tone reproduction curves" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1, 3-6, and 14-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Tandon et al. (USP 6,556,300).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Tandon et al. disclose a method for calibrating a marking system of at least one or more printers to maintain color consistency with a reference printer comprising (Fig.6):

- a) obtaining a printed reference (test sheet 30) on said reference printer, said printed reference (test sheet 30) having at least one test patch (31)(Figs.4, 6);
- b) obtaining at least one reflectance value from said test patch (31) in the printed reference (e.g. Col.19, lines 22-30);
- c) creating sensor reference values (14) for each printer of said marking system by:
  - placing the printed reference in the input tray (36) of each printer of said marking system (Fig.6, Col.20, lines 59-61);
  - transporting said printed reference (test sheet 30) through the paper path of each printer of said marking system (Fig.6, Col.21, lines 13-16); and

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- obtaining at least one reflectance value from the printed reference using the sensors (14) of each printer of said marking system (Col.19, lines 57-59); and
- d) calibrating the control system (100) of each printer of said marking system using the obtained reflectance values (e.g. Col.12, lines 53-59, Col.21, lines 7-25).

Regarding claim 3, Tandon et al. disclose the obtained reflectance values are first converted into color values to be used as reference values (e.g. Col.20, lines 24-28).

Regarding claim 4, Tandon et al. disclose the control system of each printer is a gray balanced control system (e.g. Col.8, lines 52-55).

Regarding claim 5, Tandon et al. disclose obtaining reflectance values comprises:

- a) obtaining reflectance values from one or more first test patches each aligned in a first direction (e.g. Col.3, lines 1-8, Col.26, lines 8-17); and
- b) obtaining reflectance values from one or more second test patches each aligned in a second direction that crosses said first direction (e.g. Col.3, lines 1-8, Col.26, lines 8-17).

Regarding claim 6, Tandon et al. disclose said first direction is a direction of least nonuniformity and said second direction is a direction of greatest non-uniformity (e.g. Col.24, lines 20-29, Col.26, lines 8-17).

Regarding claim 14, Tandon et al. disclose wherein said set of spatial gray balanced tone reproduction curves comprises a pixel-wise spatial gray balanced tone reproduction curve (e.g. Col.8, lines 52-55, Col.9, lines 1-17).

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Regarding claim 15, Tandon et al. disclose wherein said plurality of reflectance values comprises an iterative process (calibration), which converges reflectance values toward at least one desired value (e.g. Col.24, lines 30-34).

Regarding claim 16, Tandon et al. disclose wherein each iteration (calibration) uses revised successive test patterns (test patches) (e.g. Col.12, lines 56-59, Col.13, lines 28-35).

Regarding claim 17, Tandon et al. disclose wherein each successive pattern includes a revised version of said test patches (e.g. Col.12, lines 56-59, Col.13, lines 28-35).

Regarding claim 18, Tandon et al. disclose each successive test pattern is marked based on a test pattern file that has been updated (e.g. Col.13, lines 25-35).

Regarding claim 19, Tandon et al. disclose said updating is based on information obtained by comparing the reflectance values with the desired values (e.g. Col.24, lines 46-54).

Regarding claim 20, Tandon et al. disclose each successive test pattern is marked based on a revised spatial gray balanced tone reproduction curve (e.g. Col.8, lines 52-55, Col.9, lines 1-17).

Regarding claim 21, Tandon et al. disclose each successive test pattern has been revised based on information obtained by comparing reflectance values with desired values (e.g. Col.24, lines 46-54).

***Claim Rejections - 35 USC § 103***

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over Tandon et al. (USP 6,556,300) in view of Ueda et al. (US 2003/0112355 A1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the

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invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Regarding claim 2, Tandon et al. fail to teach, no toner or oil is developed on the printed reference.

Ueda et al. teach no toner is developed on the printed reference (e.g. [0066]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to inform no toner is developed on the printed reference as taught by Ueda et al. in a method for calibrating a marking system of Tandon et al. for purpose of providing a patch forming device for forming a plurality of color patches to be used for determining output characteristics of an image forming unit that can form images using a plurality of different color agents (Ueda et al., [0012]).

***Allowable Subject Matter***

7. Claims 7-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 7, none of the prior art of record teaches or suggests the combination of a method for calibrating a marking system of at least one or more printers to maintain color consistency with a reference printer comprising:



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- a) obtaining a printed reference on said reference printer, said printed reference having at least one test patch;
- b) obtaining at least one reflectance value from said test patch in the printed reference;
- c) creating sensor reference values for each printer of said marking system by:
- placing the printed reference in the input tray \ of each printer of said marking system;
  - transporting said printed reference (test sheet 30) through the paper path of each printer of said marking system; and
  - obtaining at least one reflectance value from the printed reference using the sensors of each printer of said marking system; and
- d) calibrating the control system of each printer of said marking system using the obtained reflectance values; wherein obtaining reflectance values comprises:
- obtaining reflectance values from one or more first test patches each aligned in a first direction; and
  - obtaining reflectance values from one or more second test patches each aligned in a second direction that crosses said first direction; said second test patches having at least one patch of CMY gray extending in said second direction. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

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Regarding claim 9, none of the prior art of record teaches or suggests the combination of a method for calibrating a marking system of at least one or more printers to maintain color consistency with a reference printer comprising:

a) obtaining a printed reference on said reference printer, said printed reference having at least one test patch;

b) obtaining at least one reflectance value from said test patch in the printed reference;

c) creating sensor reference values for each printer of said marking system by:

- placing the printed reference in the input tray \ of each printer of said marking system;

- transporting said printed reference (test sheet 30) through the paper path of each printer of said marking system; and

- obtaining at least one reflectance value from the printed reference using the sensors of each printer of said marking system; and

d) calibrating the control system of each printer of said marking system using the obtained reflectance values; wherein obtaining reflectance values comprises:

- obtaining reflectance values from one or more first test patches each aligned in a first direction; and

- obtaining reflectance values from one or more second test patches each aligned in a second direction that crosses said first direction; wherein at least one of said second test patches extending the length of the marking path of that printer. It is these limitations as they are claimed in the combination with other

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limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 10, none of the prior art of record teaches or suggests the combination of a method for calibrating a marking system of at least one or more printers to maintain color consistency with a reference printer comprising:

a) obtaining a printed reference on said reference printer, said printed reference having at least one test patch;

b) obtaining at least one reflectance value from said test patch in the printed reference;

c) creating sensor reference values for each printer of said marking system by:

- placing the printed reference in the input tray \ of each printer of said marking system;

- transporting said printed reference (test sheet 30) through the paper path of each printer of said marking system; and

- obtaining at least one reflectance value from the printed reference using the sensors of each printer of said marking system; and

d) calibrating the control system of each printer of said marking system using the obtained reflectance values; wherein obtaining reflectance values comprises:

- obtaining reflectance values from one or more first test patches each aligned in a first direction; and

- obtaining reflectance values from one or more second test patches each aligned in a second direction that crosses said first direction; and

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obtaining a set of gray balanced tone reproduction curves based on the reflectance values of said first test patches and the reflectance values of said second test patches with said set of gray balanced tone reproduction curves. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H Le whose telephone number is 571-272-2275. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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John H. Le

Patent Examiner-Group 2863

February 16, 2005



John Barlow  
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